Municipal Solid Waste 101

One of the things that we do every day is throw away garbage. The act is so common that it doesn't even register. We've all heard the cliché: "Out of

sight, out of mind." Well, even when garbage is in sight, it seemingly passes under our eyes virtually unnoticed. But it's there. Then it's gone.

Before reading any further, here's a term you need to know. What you call trash or garbage is called solid waste by waste management professionals. There are different kinds of solid waste, but one type measured nationwide by the

U.S. Environmental Protection Agency (U.S. EPA) and in South Carolina is municipal solid waste (MSW).

What is MSW? It's the combined residential, institutional and business waste generated that includes but is not limited to paper, cans, food scraps, yard trimmings and packaging. It does not include, for example, any industrial processing or manufacturing waste. What's that? It's the scrap material left after products are made.

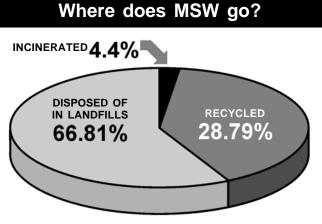
How much MSW do we make?

That question is not as simple to answer as it would seem. Just think of all the different sources – or generators – of MSW. You make it. And your family makes it. And schools, businesses, organizations and industry make it. Everybody makes MSW. What you do with it is important.

While it's hard to determine with precision how much MSW is generated, it can be measured. In South Carolina, county governments send an annual report to the S.C. Department of Health and Environmental

Control (DHEC) that includes how much MSW was generated within the county and what happened to it – whether it was recycled or disposed of in a landfill or

in an incinerator. DHEC also receives reports from MSW landfills, transfer stations and incinerators.



SOURCE: The State of Recycling in South Carolina for Fiscal Year 2003

And the number is...

So, how much MSW did we make? South Carolinians generated more than 4.57 million tons of MSW in fiscal year (FY) 2003 (July 1, 2002 - June 30, 2003) according to the S.C. Solid Waste Management Annual Report for FY 2003. How do we

compare nationally? The amount of MSW generated in calendar year 2001 (the latest numbers available) nationwide was 229.2 million tons according to the U.S. EPA.

Where does the MSW go?

How much MSW did we recycle? South Carolinians recycled an average of 1.75 pounds per person per day (p/p/d). The national average is 1.3 p/p/d according to the U.S. EPA.

How much MSW did we dispose of each day? South Carolinians disposed of an average of 4.35 pounds of MSW p/p/d in FY 2003. By comparison, Americans disposed of an average of 4.4 p/p/d of MSW in 2001 according to the U.S. EPA.

In other words, of the 4.57 million tons of MSW generated in South Carolina in FY 2003, more than 1.31 million tons (28.79 percent) were recycled. Of the remaining amount, about 3 million tons (66.81 percent) were disposed of in the state's 18 MSW landfills while 201,146 tons (4.4 percent) were sent to

the state's only MSW incinerator located in Charleston County.

How do we compare nationally? The amount of MSW recycled nationwide in 2001 was about 68 million tons or about 30 percent of the nation's total MSW stream. In addition, about 127.6 million tons or about 55 percent of the nation's total MSW generated was disposed of in landfills while about 33.6 million tons or about 15 percent was sent to incinerators.

There are other places MSW may go before being disposed of in a landfill, sent to an incinerator or recycled. Some MSW is taken to a transfer station where it is compacted and loaded on large trailers. This is done usually when the community is a long distance from a landfill. Some MSW is taken to a materials recovery facility (MRF and pronounced "Murf") where recyclables are sorted to market. The recyclables are taken to companies that process the materials and make them into new products while the garbage goes to a MSW landfill or incinerator.

How do the recyclables and garbage get to where they're going?

Usually, they are taken by truck. But garbage also can be moved by both barge and rail.

What's in our MSW?

South Carolina measures the total MSW disposed of and recycled. Those two figures are added to determine the total MSW generation for the state. South Carolina does not measure MSW disposed of by specific category (aluminum, plastic, etc.) but does measure MSW recycled by specific category.

The U.S. EPA calculates – by weight – what makes up the nation's MSW stream. In 2001, of the total

MSW generated *before* recycling, paper and paperboard (which includes office paper, newspaper and cardboard boxes) was the largest category, comprising 35.7 percent or 81.9 million tons. Yard trimmings were second (12.2 percent or 28 million tons) followed by food scraps (11.4 percent or 26.2 million tons), plastics (11.1 percent or 25.4 million tons) and metals (including aluminum cans and steel cans – 7.9 percent or 18.1 million tons). Rubber, leather and textiles (7.1 percent or 16.3 million tons), wood (5.7 percent or 13.2 million tons) and glass (5.5 percent or 12.6 million tons) rounded out the top eight categories.

Think before you throw...

Of all the environmental issues we face, garbage is one we can do something about. The choices we make every day affect not only the amount but also the type of waste we throw away.

You know the three Rs. Waste reduction, which is making less waste in the first place, is the preferred option of waste management. Reduction is followed by reuse, which means repairing items, donating them to a charity or selling them. Reuse is followed by recycling and composting, which is the process of turning materials that otherwise would become a waste into valuable new resources.

Disposing of garbage in a landfill or burning it at an incinerator should be the last option for waste management.

To learn more about MSW and ways you can reduce the amount you generate at home, school and work or more about recycling, composting and buying recycled, call DHEC's Office of Solid Waste Reduction and Recycling at 1-800-768-7348 or visit www.scdhec.gov/recycle.





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DHEC's Office of Solid Waste Reduction and Recycling FYIs provide general information on environmental topics. Readers are encouraged to reproduce this material. For more information about solid waste issues, please call **1-800-768-7348** or visit our Web site at **www.scdhec.gov/recycle**. Please send written correspondence to: DHEC's Office of Solid Waste Reduction and Recycling, 2600 Bull Street, Columbia, SC 29201.